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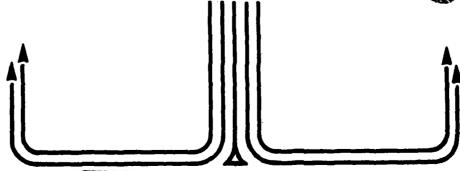
AIR CÖMMAND AND STAFF COLLEGE

-STUDENT REPORT

PREPARING WEATHER SUPPORT DOCUMENTS: A GUIDE FOR DETACHMENT COMMANDERS/CHIEFS

MAJOR THOMAS N. WALKER 86-2630 —— "insights into tomorrow" ——





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REPORT NUMBER 86-2630

TITLE PREPARING WEATHER SUPPORT DOCUMENTS: A GUIDE FOR DETACHMENT COMMANDERS/CHIEFS

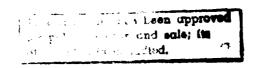
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Submitted to the faculty in partial fulfillment of requirements for graduation.

AIR COMMAND AND STAFF COLLEGE AIR UNIVERSITY MAXWELL AFB, AL 36112



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18. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE M	ARKINGS					
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This handbook revises a previous handbook and standardizes Air Weather Service wings' publications on how to prepare weather support documents. It recommends areas to be addressed in a weather support document and provides several examples in both regulation and plan formats. It also contains a comprehensive checklist for use in developing or updating a weather support document. The handbook was designed for detachment commanders and chiefs to use as a primary source in preparing and updating weather support regulations/plans.								
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Air Weather Service (AWS) detachments provide weather support to Air Force and Army flying units located throughout the Most of the support requirements and procedures are documented in a weather support regulation or plan. documents evolved over the years to accommodate higher headquarters' directives and to describe support procedures as determined by individual weather commanders. Not unexpectedly, the formats and contents of weather support regulations and plans varied considerably. In 1979, Major (currently a colonel selectee) Patrick J. Larkin completed a research project at Air Command and Staff College entitled, "Writing Weather Support Agreements." Subsequently, AWS wings published pamphlets on how to prepare weather support documents. These publications were based on the work done by then Major Larkin, and they provided useful information to AWS units. However, some of the previous problems of content and format still existed since there was not a single source on writing weather support regulations/plans.

This handbook revises the previous handbook and standardizes the information in AWS wings' publications on preparing weather support documents. It contains recommended areas to be addressed, discusses responsibilities, provides specific examples of documented support in regulation and plan formats, and includes a comprehensive checklist. The goal is for Headquarters Air Weather Service to publish the handbook which should eliminate the need for wing publications on the same subject.

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The author appreciates the suggestions made by members of the AWS Field Support Division (AWS/DOOF) as a result of their review of the draft. These suggestions were incorporated into the handbook. He also appreciates the help from weather members of the MAC/IG staff and the many detachment commanders who provided a copy of their weather support regulation or plan. A special thank you goes to Major Thomas Jahnke of the Air Command and Staff College Faculty for his time and efforts as an advisor for the project.

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Weather Observer (1960-1964): Myrtle Beach AFB, South Carolina and Sondrestrom AB, Greenland

Weather Forecaster (1965-1971): Shaw AFB, South Carolina and RAF Alconbury, England

Weather Officer (1972-1975): Myrtle Beach AFB, South Carolina and Wiesbaden AB, Germany

Chief Forecaster (1976-1977): Sembach AB, Germany

Weather Operations Staff Officer (1977-1981): Pentagon, Washington, DC (Air Staff Training) and HQ Air Weather Service, Scott AFB, Illinois

Unit Commander (1981-1983): England AFB, Louisiana

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PREPARING WEATHER SUPPORT DOCUMENTS: A GUIDE FOR DETACHMENT COMMANDERS/CHIEFS

CHAPTER ONE

INTRODUCTION

PURPOSE

This handbook revises a previous handbook and standardizes the procedures in several publications within Air Weather Service (AWS) on the preparation of weather support documents, namely weather support regulations and weather support plans (WSR/WSP). It provides the detachment commander or detachment chief (DETCO) detailed guidance on preparing a new document or updating any portion of an existing one. The handbook applies primarily to AWS units supporting flight operations.

ROLE OF THE DETACHMENT COMMANDER/CHIEF

The DETCO serves as the staff weather officer (SWO) to the wing commander (Air Force) or to the post installation commander (Army). In this role, the DETCO provides or arranges for weather support required by the various customers on the base or post. Normally, the DETCO describes this support in a WSR/WSP. Though written in coordination with supported customers, the DETCO is ultimately responsible for the accuracy and currency of the document. To effectively accomplish this task, he/she should establish rapport with the following key agencies:

AIR FORCE

- Wing Deputy Commander for Operations
- Flying Squadron Commander/ Operations Officer
- Airfield Manager
- Command Post

ARMY

Assistant Chief of Staff, G2

Battalion/Company Commander or Operations Officer

Airfield Commander

Emergency Operations Center

- Information Services Squadron Commander
- Deputy Commander for Maintenance -
- Deputy Commander for Resources Assistant Chief of Staff,
- Safety Officer Safety Officer
- Security Police Squadron Provost Marshal Commander

RECOMMENDED AREAS TO BE ADDRESSED IN WSR/WSP

- Duty Priorities
- Forecasting Services
- Observing Services
- Weather Watch Program
- Weather Warnings
- Weather Advisories
- Dissemination Procedures
- Capabilities and Limitations
- Weather Forecast Criteria
- Weather Observation Criteria
- Observing Site Limitations
- Cooperative Weather Watch
- Pilot-to-Metro Service
- Pilot Reports

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- Operational Verification Program
- Weather Equipment Maintenance
- Back-up Support
- Reciprocal Agreements

CHAPTER TWO

BEFORE WRITING THE DOCUMENT

This chapter outlines some of the things the DETCO should do before attempting to write or update a WSR/WSP.

THE PRIMARY CUSTOMER

The DETCO should become thoroughly familiar with his/her primary customer's mission and support requirements. The following areas should be investigated:

- Determine concept of operation; e.g., local flights only, night and weekend flying, average number of sorties, duration, etc.
 - Know weather minimums for flight operations.
 - Know the weather sensitivities of the weapon system(s).
- Determine the type and scope of weather support required; e.g., mass weather briefings twice a day, over-the-counter briefings, special or routine support from Air Force Global Weather Central, etc.

THE SECONDARY CUSTOMER

The DETCO should also become familiar with his/her secondary customers' (civil engineering, maintenance, etc.) requirements for weather support. Items to consider:

- Is there a need for information on wind chill, heat stress, lightning, surface winds, road/ground conditions, etc?

- Is climatic data routinely required?

SERVICES REQUIRED BY DETACHMENT

The DETCO should determine those services required by the unit which need to be addressed in the support document. Items to consider:

- The information services squadron provides maintenance for weather equipment.
- Air traffic control personnel monitor weather conditions, relay pilot reports, and provide back-up radar support.

- The command post submits significant events reports for the unit.
- The safety office and security police squadron relay appropriate information on detachment personnel to the commander for his/her use in submitting required reports.
- The host civil engineering organization provides back-up power support.
- Base operations puts weather information in flight information publications (FLIP), furnishes runway condition readings, notifies the detachment of aircraft emergencies/incidents, collects notices-to-airmen (NOTAMs), relays warnings and advisories, and notifies the detachment of the arrival or weather diversion of dignitaries.

CONSULTATION

After the DETCO fully understands the customer's mission and support requirements, plus the services required by the unit, he/she can begin the consultation phase of writing or updating the WSR/WSP. This phase includes the following:

- Obtain agreement on support procedures.

DO TO THE PROPERTY OF THE PROP

- Identify the need for new equipment or facilities.
- Determine adequacy of provided weather support.
- Explain capabilities/limitations and operational verification program.
- Determine if other support agreements can be incorporated into the WSR/WSP.
- Visit the host base plans office or the publications branch to obtain administrative details on preparation of the WSR/WSP.

Chapter Three

DOCUMENTING SUPPORT PROVIDED BY THE DETACHMENT

The weather support document should be written as clearly and succinctly as possible. It should also agree with other prescribing directives and be written in a non-technical format. When technical terms are used, they should be defined. Normally, information included in another document need not be totally repeated; a reference will do. However, if the customer does not have ready access to the reference material (Federal Meteorological Handbook, weather regulations, etc.), then the information should be included in the support document. Attachments/appendices are good ways to document information such as special and local observation criteria, forecast specification and amendment criteria, dissemination formats, etc. The document should contain a comprehensive table of contents since most customers are less familiar with these documents. See Figures 3-1 and 3-2.

DEPARTMENT OF THE AIR FORCE GREENWOOD AFB REGULATION 105-X HQ 70th Tactical Fighter Wing (TAC)
Greenwood AFB TX XXXXX-XXXX XX Month XX

Weather

WEATHER SUPPORT

This regulation establishes the responsibilities and procedures for providing and using weather services at Greenwood AFB. It applies to all agencies described herein.

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Figure 3-1. Sample Table of Contents - Regulation Format.

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HEADQUARTERS 70th TACTICAL FIGHTER WING Greenwood AFB, Texas XX Month XXXX

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Figure 3-2. Sample Table of Contents-Plan Format.

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SELECTING THE FORMAT

The DETCO must determine which format (regulation or plan) best suits the needs of his/her primary customer. Both formats have advantages and disadvantages.

- Weather Support Regulation
 - - Advantages
 - - Ensures annual review
 - - Tasks organizations
 - - Requires fewer pages
 - - Easier to write and use
 - - Disadvantages
 - - Takes longer to coordinate and publish changes
- Weather Support Plan
 - - Advantages
 - - Ensures annual review
 - - Tasks organizations
 - - Easier to coordinate and publish changes
 - - Disadvantages
 - - Requires nonproductive sections
 - - More difficult to write and use
 - - Requires more pages

AREAS CONSIDERED

The following major areas should be covered in the support document:

- General Information
- Forecasting Services
- Observing Services
- Weather Warning Services
- Weather Advisory Services
- Reciprocal Support

The rest of the chapter discusses the first five areas and provides some examples of documenting them in the WSR/WSP. Reciprocal support is discussed in Chapter Four. Figures 3-1 and 3-2 and the checklist in the Appendix provide additional information to help the DETCO write or revise a complete document.

General Information

The introductory chapter of the WSR and the basic plan section of an OPlan should contain the following: (Some examples are shown in Figure 3-3.)

- General Statement
- Terms Explained (Use definitions from official AWS sources.)

- - Meteorological Watch
- - Weather Advisory (WA)
- - Weather Warning (WW)
- - Watch-Warning
- - Terminal Aerodrome Forecast (TAF)
- - Basic Weather Watch (BWW)
- - Cooperative Weather Watch
- Composite Duty Priorities
- Capabilities/Limitations
- Tasks/Responsibilities
- Release of Weather Information to Non-DOD Agencies
 - 1-1. General. Detachment 5, 35th Weather Squadron (Det 5, 35 WS) provides or arranges weather services to the 70th Tactical Fighter Wing (70 TFW) and other units assigned to Greenwood AFB, Texas. Basic concepts and procedures are outlined in Air Force, major air command, Air Weather Service (AWS), 8th Weather Wing (8 WW), and 35 WS directives. This document establishes requirements and procedures for areas of weather support which must be coordinated at the local level to meet mission needs. It consolidates weather support requirements and procedures for peacetime operations and eliminates the need for written agreements between the detachment and supported organizations. It does not cover weather support procedures for emergency war operations (EWO) or certain other special operations/procedures; e.g., toxic corridor. These are covered in applicable plans/regulations.

5. Tasks:

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- a. The 70 TFW Deputy Commander for Operations will provide support as described in Annex H, Appendix 5, Tab B.
- b. The 3001 ISS Commander will provide support as described in Annex H, Appendix 5, Tab A.
- 6. Release of Weather Information to Non-DOD Agencies. Support to non-DOD agencies and the general public will not be provided except as covered in AFR 105-9.

Figure 3-3. Examples of General Information in Weather Support documents.

Forecasting Services

This section should include information on hours of operation, back-up support (if applicable), terminal aerodrome forecast (TAF) procedures, TAF specification and amendment criteria, weather briefings, pilot-to-metro service (PMSV) procedures, and the operational verification program. Also, include unique local forecasting services. Although weather warnings and weather advisories are considered forecast products, recommend they be addressed in separate sections. See Figure 3-4 for examples of forecasting services and procedures.

HEADQUARTERS 70th TACTICAL FIGHTER WING Greenwood AFB, Texas XX Month XXXX

APPENDIX 1 ANNEX H 70 TFW OPLAN 105-XX FORECASTING SERVICES

- 1. Hours of Operation. Detachment forecasters provide forecasting services from 0500L to 1700L 7 days a week.
- 2. Terminal Aerodrome Forecast (TAF). The TAF is issued every 6 hours (when the forecaster is on duty) and covers a 24-hour period. TAFs will be prepared and disseminated over the weather dissemination system at 0500L, 1100L, and 1700L. See Annex H, Appendix 1, Tab A for forecast specification and amendment criteria.

3. Briefing Services:

- a. Flight Weather Briefings. Forecasters provide aircrew briefings at the base weather station and update briefings for local flights by phone. Out-of-station briefings for special missions require 24-hour advance notice. Requests will be coordinated with the appropriate wing weather officer. During forecaster non-duty hours, Det 6, 35 WS forecasters provide flight weather briefings by phone.
- b. Planning Weather Sheet. The duty forecaster prepares a planning sheet each day for delivery at 0600L and 1200L by the transportation squadron. The sheet includes take-off winds, temperatures, warnings and advisories, forecasts for alternates, and a weather depiction chart. The sheet is for planning purposes only and is not amended.
- 4. Pilot-to-Metro Services (PMSV). Det 5 provides PMSV 24 hours a day on assigned frequency UHF 344.6. (Observers are permitted to relay weather observations and forecasts when a forecaster is not on duty.) Aircrews are encouraged to relay pilot reports during PMSV contacts.

Figure 3-4. Examples of Forecasting Services and Procedures.

TAF Specifications and Amendment Criteria. Criteria should be listed in an attachment or a tab (see Figure 3-5). Here it is less cumbersome and provides the reader quicker access to the information. Recommend DETCOs follow AWSR 105-27 closely in describing criteria, although some customers' requirements may have to be included in the criteria. However, closely spaced ceiling heights (300, 500, 700, etc.) and visibility values are discouraged since forecasting this precisely is not within the state of the art. This can be best handled by observed weather advisories.

TAP SPECIFICATION AND AMENDMENT CRITERIA

- 1. Specification Criteria. The TAF will specify the time of occurrence, the duration, and the intensity (if applicable) when one or more of the following are expected to occur:
- a. Ceiling and/or visibility increases to, exceeds, or decreases to less than any of the following values:

CEILING	VISIBILITY
3000 feet	3 miles
1500 feet	2 miles
1000 feet	1/2 mile
200 feet	•

- b. A change in wind speed of 10 knots or more, or a change in wind direction of
- 2. Amendment Criteria. The TAF will be amended whenever one of the following conditions occurs or is expected to occur but is not specified in the latest forecast. (Note: The TAF might not be amended if conditions are expected to persist less than 30 minutes.)
- a. Ceiling or visibility passes through the following categories: (Note: Categories are determined by the lower of the ceiling or visibility elements.)

VISIBILITY
3 miles
2 miles
1/2 mile

b. A change in wind speed of 10 knots or more, or a

Figure 3-5. Examples of TAF Specification and Amendment Criteria.

Weather Warnings

A SUNANCE CONCRETE SUCCESSION OF SUCCESSION

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Weather warning (WW) support is probably the most important service provided by AWS units. Hence, support procedures should be clearly described in the WSR/WSP. The document should include the following:

- Area Covered. Area is normally not larger than 5 NM in radius.
- Criteria (See figure 3-6). Criteria should agree with criteria in terminal forecast reference notebook and AWSR 105-8, Chapter 3.
- Leadtimes. Leadtimes should be within forecast capability as listed in AWSR 105-8 and within reactive capability of supported agency.
 - Centrally Produced Warnings (if applicable).
 - Dissemination Procedures.

WEATHER WARNING CRITERIA

Criteria	DESIRED LEADTIME
 A. Tornadoes B. Surface winds 35 knots or greater C. Hail 1/2 inch or greater D. Freezing precipitation E. Heavy snow (2 inches in 12 hours) 	15 minutes 30 minutes 30 minutes 60 minutes 60 minutes

Figure 3-6. Example of Weather Warning Criteria.

Weather Advisories

Advisories may be forecast or observed and can be for a terminal or a local flying area. They can also be a combination of these. Therefore, procedures for handling advisories can become cumbersome and confusing unless given a lot of thought. The desire is to consolidate criteria where possible and keep leadtimes realistic. The following need to be included in the WSR/WSP:

- Area Covered
- Criteria
- Leadtimes (within forecast and reactive capabilities)
- Dissemination Procedures (See notification diagram in Figure 3-7.)

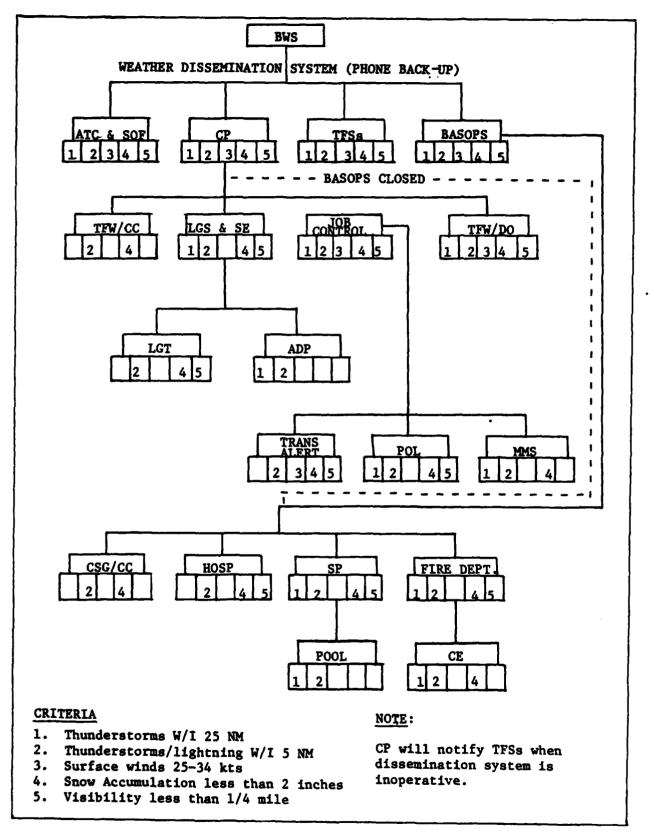


Figure 3-7. Sample Weather Advisory Notification Diagram.

Observing Services

This section should describe observer duty hours, observation procedures, site limitations, cooperative weather watch procedures, dissemination procedures, alternate observation site procedures, and observation criteria. All DETCOs should review flight information publications (FLIPs) to ensure flight minimums are included in criteria. It is recommended that observation criteria be described in an attachment (regulation) or a tab (plan). Figure 3-8 provides examples of observing services and procedures.

- 3-2. Basic Weather Watch. Observers conduct a basic weather watch (BWW) from the base weather station. In addition to taking scheduled observations, the observer rechecks weather conditions at least every 20 minutes when any of the following are observed or are forecast to occur within 1 hour:
 - Ceiling 1500 feet or less
 - Visibility 3 miles or less
 - Precipitation
 - Fog

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- 3-3. Observing Site Limitations. Buildings obstruct the observer's view of the approach end of Runway 18. At night, floodlights near the flight line make it difficult to see clouds and visibility markers.
- 3-4. Cooperative Weather Watch. Under the BWW, tower personnel assist Det 5 observers in monitoring weather conditions. They will notify the duty observer of significant weather phenomena, including reduced sector visibilities, precipitation, thunderstorms/lightning, and any other significant weather.
- 3-5. Dissemination Procedures. Observers will disseminate observations over the weather dissemination system (WDS). If the WDS is inoperative, observations will be disseminated by phone to the tower, command post, and base operations. The command post will relay observations to all other agencies on the WDS until the system is restored.

Figure 3-8. Examples of Observing Services and Procedures.

Chapter Four

DOCUMENTING RECIPROCAL SUPPORT

BASE/POST SUPPORT

Many base/post agencies provide services to the weather unit which need to be described in the WSR/WSP. Incorporating the various agencies' services and responsibilities in the document eliminates the need for separate letters of agreement. Recommend the following agencies and the related services/responsibilities be included in the support document. Be sure to include detachment responsibilities when appropriate. See Figure 4-1 for some examples of base/post reciprocal support.

Agencies and Reciprocal Support

- Information Systems Squadron
 - - Equipment maintenance and restoral
- Air Traffic Control Facility
 - - Relay of PIREPs
 - - PMSV radio procedures
 - - Notification of runway change
 - - Back-up radar support
 - - AFCC indoctrination
 - - Cooperative weather watch
- Operations Center
- -- Notification of accidents, mishaps, and events in which weather, weather service, or resources are involved
 - - Relay of warnings and advisories
 - - Alert notifications
 - - Submission of OPREP-3 reports
 - Base Operations
 - - Relay of warnings and advisories
 - - Relay of runway surface conditions
 - - Notification of arrival/diversion of dignitaries
 - - Notification of aircraft mishaps/emergencies
 - - Handling of NOTAMS
 - - Publication of weather information in FLIP
 - Safety Office
- - Notification of accidents/incidents involving weather personnel
 - - Conduct safety assistance visits/inspections
 - Security Police

- - Notification of serious crimes/incidents involving weather personnel
 - - Relay of warnings and advisories
 - Civil Engineering Squadron
 - - Provide and maintain back-up power equipment
 - - Relay of warnings and advisories
 - Transportation Squadron
 - - Deliver weather products
 - - Transport weather personnel to observation site/range
 - 7-1. General. The agencies listed in the chapter will provide services as described below.
 - 7-2. 3001 Information Systems Squadron (ISS) will maintain all meteorological equipment except that maintained by civilian contract. Maintenance personnel will respond to reports of equipment outage(s) and restore equipment according to the following priorities:
 - a. Control Tower will:
 - (1) Relay PIREPs to the duty forecaster/observer.
 - (2) Conduct daily operational checks of the PMSV radio.
 - (3) Notify the duty observer of changes in the active runway and changes in runway light setting intensity.
 - (4) Provide AFCC indoctrination to weather personnel.
 - (5) Provide cooperative watch by notifying duty observer whenever any of the following occur:
 - b. RAPCON will provide back-up radar support, workload permitting, whenever Det 5's storm detection radar is inoperative.
 - c. Det 5 will:
 - (1) Notify 3001 ISS Job Control of all outages involving meteorological equipment.
 - (2) Notify 3001 ISS Job Control when equipment is restored or the outage condition changes.
 - (3) Request daily PMSV radio checks.
 - (4) Provide weather training for tower personnel certification.
 - (5) Notify RAPCON when radar outage occurs and when again operational.

Figure 4-1. Examples of Base/Post Reciprocal Services and Responsibilities.

7.3. Operations Center will:

- a. Notify Det 5 of all accidents, mishaps, and events in which weather, weather service, or weather resources are involved.
- b. Submit, after coordination with Det 5, OPREP-3 reports involving weather, weather service or weather resources. Include the following addresses:
- c. Relay warnings and advisories according to para 4-4 and para 5-3.
 - d. Notify Det 5 of changes in alert status.

7.4. Base Operations will:

- a. Pick up NOTAMs from the observing section.
- b. Provide runway surface condition/runway condition reading (RSC/RCR) data to the weather observer for longline transmission.
 - c. Notify Det 5 of aircraft mishaps and emergencies.
 - d. Notify Det 5 of changes in field minimums.
- e. Notify Det 5 of the arrival of dignitaries or the diversion of dignitaries when weather or weather service may be the cause.
- f. Include appropriate weather information in the FLIP.
- g. Relay weather warnings and advisories according to para 4-4 and para 5-3.

Figure 4-1. Continued.

OFF-BASE SUPPORT

In addition to documenting base/post reciprocal support, it may be appropriate to incorporate support provided by an off-base unit; e.g., another weather unit providing telephone weather briefings to base/post and transient aircrews. Back-up radar support and meteorological satellite support could also be incorporated in the WSR/WSP. However, DETCOs should not incorporate support procedures which don't pertain to the host; e.g., weather services provided to National Guard or Reserve units. Figure 4-2 is an example of remote briefing support procedures and responsibilities.

HEADQUARTERS TACTICAL FIGHTER WING Greenwood AFB, Texas XX Month XXXX

TAB H APPENDIX 4 ANNEX H

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REMOTE FLIGHT WEATHER BRIEFING SUPPORT

1. General. Detachment 6, 35 WS, Drew AFB, Texas, will provide flight weather briefings to base and transient aircrews when the Det 5 forecaster is not on duty.

2. Procedures:

- a. Det 6, 35 WS will:
- (1) Provide telephonic flight weather briefings upon request during Det 5 forecaster non-duty hours (1700L to 0500L Monday through Sunday).
- (2) Dedicate a class "C" telephone for incoming aircrew calls and publish the number in the FLIP.
- (3) Accept long distance government collect calls from authorized personnel at Greenwood AFB.
 - b. Det 5, 35 WS will:
 - (1) Maintain a pilot briefing display (See Encl. 1).
- (2) Provide a dedicated class "A" telephone for aircrews.
- (3) Notify Det 6 of any changes in forecaster duty hours.
- Duty Priorities/Limitations:

Figure 4-2. Example of Off-base Reciprocal Support Procedures and Responsibilities.

Chapter Five

PUBLICATION AND IMPLEMENTATION

This chapter describes the actions the DETCO must take to publish the support document and to keep it current and effective.

COORDINATION

The DETCO must coordinate the document, or changes to it. with all the tasked agencies. In addition, the document should be coordinated with other agencies that have an interest in it. For example, if an agency's name appears in the draft, then the agency should have an opportunity to review it before it's published. Providing draft copies to primary agencies; e.g., deputy commanders for operations, resources, maintenance, and the information services squadron commander, etc., expedites the coordination process. A brief visit with each to discuss the document or a change is much more effective than a phone call or a "buckslip" attached to the draft. The primary agencies will then pass the draft to their staffs and subordinate units for their review and coordination. It's a good idea to also visit some of these; e.g., operations center, tower, base operations, etc., because they are key participants in the WSR/WSP. During the coordination process, the DETCO should be prepared to explain and justify support procedures and requirements outlined in the document. Use source documents when appropriate. One last recommendation before publishing: Send the parent weather squadron a copy of the draft for their review and comments.

PUBLICATION

Plan the publication date far enough ahead to give ample time for implementation. The people in the publications or plans shop can help in selecting the date. They will also provide necessary assistance in getting the document published. Be sure to order enough copies for the detachment so each work center will have a copy.

IMPLEMENTATION

After publication the WSR/WSP becomes the basic reference for many detachment standing operating procedures (SOPs) and detachment operating instructions (DOIs). It is imperative that SOPs and DOIs comply with the WSR/WSP. Otherwise, support provided to the detachment's customers could be degraded. Forecasters and observers should be thoroughly familiar with the document so they can quickly recognize inconsistencies between it and SOPs. Any discrepancies should be immediately corrected.

PERIODIC REVIEWS

The DETCO should review the WSR/WSP at least semiannually using the checklist in the Appendix. One of these reviews should coincide with the mandatory annual review so that any new customer requirements can be incorporated into the document. Include all the original coordinating agencies in the annual review. In addition to any other suggested changes, recommend each supported agency provide the following:

- Weather warning and weather advisory criteria and required leadtimes.
 - Frequency (duty hours only; 7 days a week, etc.).
 - Source and method of notification, including back-up.
 - Justification for required support.
 - Actions taken by customer.

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- Estimated cost of action taken each time customer reacts to warnings/advisories.
- Description of resources being protected and estimated dollar value.
- Office of primary responsibility (office symbol and phone number).

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APPENDIX	A	P	PE	IN	\mathbf{D}	IX
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WEATHER SUPPORT DOCUMENT CHECKLIST

GENERAL

- Is the document arranged and organized according to AFR 5-1/AFR 5-8 (regulation) or AFR 28-3 (plan)?
- Are unit designators current?

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- Has a duty priority list(s) been included? (AWSR 105-5, para 2)
- Are terms explained? Have they been taken from official sources?
- Does the document include limitations of weather service?
- Are general tasks/responsibilities listed?
- Does the document include a statement on the release of weather information to non-DOD agencies?

FORECASTING SERVICES

- Have forecaster duty hours been explained? Does the WSR/WSP describe procedures for obtaining forecasting services when the forecaster is not on duty; e.g., flight weather briefings?
- Does the WSR/WSP describe procedures on preparing and disseminating the terminal aerodrome forecast (TAF); e.g., times, duration, local dissemination code, etc? (AWSR 105-27, para 4)
- Are TAF specification and amendment criteria included? (AWSR 105-27, para 3 and 6)
- Are briefing services/procedures described; e.g., flight weather briefings, out-of-station briefings, telephone recordings, instrument refresher course briefings, etc?

CONTINUED

- Does the document contain information on availability of pilot-to-metro service?
- Does the document contain information on the operational verification program? (AWSR 178-1, para 3-2c)

WEATHER WARNINGS/WEATHER ADVISORIES

- Does the WSR/WSP clearly specify weather warning and weather advisory criteria, desired leadtimes, and agencies to be notified of each specified condition? (AWSR 105-8, para 1-5)
- Is above information consistent with information in the terminal forecast reference notebook and AWSR 105-8?
- Does the WSR/WSP clearly describe the areas covered and dissemination procedures for weather warnings and weather advisories? (AWSR 105-8, para 1-5)
- Are desired leadtimes for each weather warning and weather advisory criterion realistic and within the reactive capability of the supported agency? (AWSR 105-8, para 3-4)
- Are back-up support procedures for limited duty forecasting stations discussed? (AWSR 105-8, para 1-9)

OBSERVING SERVICES

- Have observer duty hours and the type of support been described?
- Are local and special observation criteria listed, and has information in the FLIP been incorporated in the criteria?
- Are observation site limitations described? (FMH-1B, para 2.2.1c)
- Does the WSR/WSP explain evacuation/alternate observing site procedures? (FMH-1B, para 2.2.lc)
- Are primary and back-up dissemination procedures described?

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RECIPROCAL SUPPORT

Operations Center

- Does the WSR/WSP task the operations center to submit OPREP-3 reports involving weather, weather service, or weather resources? (MACR 55-16, Vol I, AWS Sup 1)
- Does the WSR/WSP contain the appropriate telephone contacts and message addressees for OPREP-3 reports? (MACR 55-16, Vol I, AWS Sup 1)
- Are procedures established for the operations center to notify the detachment of all incidents involving weather, weather service, or weather resources? (MACR 55-16, Vol I, AWS Sup 1)
- Are procedures established for the operations center to relay weather warnings and weather advisories and to notify the detachment of alerts?

Information Services Squadron

- Does the WSR/WSP describe weather equipment maintenance and restoral responsibilities/procedures? (AWSR 105-3, para 2)
- Does the WSR/WSP describe air traffic control responsibilities/procedures on radio checks, relay of pilot reports (AWSR 105-17, para 3), cooperative weather watch (AWSR 50-10, para 3c) and cooperative radar information (FMH-7C)?

Security Police

- Does the WSR/WSP include procedures on reporting serious incidents involving weather personnel? Are appropriate addressees listed? (MACR 125-1, AWS Sup 1)

Safety Office

- Does the WSR/WSP include procedures for the safety office to notify the detachment when unit personnel appear as an injury on hospital A & D sheets or are involved in an accident?

CONTINUED

- Does the WSR/WSP task the host safety office to conduct annual safety inspections? (MACR 127-1, AWS Sup 1)

Off Base Support

- Does the WSR/WSP incorporate regional briefing support and back-up support for severe convective weather? (AWSR 105-28, para 4c; AWSR 105-8, para 1-9)

WEATHER DISSEMINATION SYSTEM

- Is the weather dissemination system described?
- Are back-up dissemination procedures described?
- Does the WSR/WSP include dissemination formats?

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